V. EXPEDITIONS AND OTHER EXPLORATION

(continued from p. 1542)

C e y l o n

The Flora of Ceylon Project. From U.S. surplus funds the Smithsonian Institution has through the initiative of Dr. F. R. F o s b e r g launched a project to revise the Flora of Ceylon. Specialists are given grants for travel to Ceylon, and subsistence and travel in Ceylon, mainly hunting after living material of the groups they will revise. Begin 1969 the following specialists were in Ceylon: Dr. R.D. Hoogland for Dilleniaceae and Magnoliaceae, Dr. A. Robijns for Bombacaceae and Sterculiaceae, and Dr. A.J.C. Grierson for Compositae. It is anticipated that Dr. A.J.G.H. Kostermans will work on Lauraceae in 1969.

T h a i l a n d

June 15th, 1968, the Second Flora of Thailand Project Expedition left Aarhus for about 2 months of field work; participants: Prof. K. Larsen, Mr. Tem Smitinand, and Mr. E. Warncke (bryologist). The expedition worked one month in the mountains West of Chiengmai (Khun Yuam, Mae Hong Son, Pai) and about one month in the western limestone area of the Peninsula.

Mr. C. F. v a n B e u s e k o m, Leyden, made, together with Mr. C. P h e n g k h l a i explorations in western Peninsular and northern Thailand, during March, April, May, and June 1968. Collections were made on Khao Yai and Khao Ngi Yai and in Erawan National Park (all in Kanchanaburi province), on Khao Luang as well as on hills near Ranong, Takua Pa and Phuket (all in the Peninsular part), and in Bo Luang, Doi Pui and Doi Chiengdao (all near Chiengmai).

In January 1969 Mr. H. P. N o o t e b o o m, Leyden, was in North Thailand, especially hunting for Symplocos.

During February and March 1968 Mr. B. H a n s e n, Copenhagen, and Mr. Tem S m i t i n a n d made a joint trip to various mountains (especially limestone) in the border area West of Chiengmai. In a few cases helicopters were used in order to visit some hardly accessible summits in a more convenient way.

M a l a y a

Early Nov. 1968 Dr. H. K e n g with some students made a short exploration trip to the Langkawi Islands, famous for their limestone flora and several endemic species bound to this substratum.

S o u t h S u m a t r a

Following his stay in the Philippines (see there), Dr. M. J a c o b s of the Rijksherbarium arrived in Bogor on 11 April 1968 for a joint exploration with Dr. B. P r i j a n t o of the Indonesian Forest Service, assisted by Mr. N e d i of the Herbarium Bogoriense. The party left Bogor on 21 April by truck for the ferry at Merak. With kind and effective cooperation on the part of the local Forestry officials, camp was set up in the province of Lampung above Giesting on the E. slope of Mt Tanggamus at 1100 m, in the upper part of the zone of destruction, which is, however, not wasted but converted into intensively cultivated land. Collecting was started on 25 April, the summit (2100 m) was reached on 3 May; the next day was the last on the mountain. The party then moved to a portion of primary forest NW. of Kota Agung at 350-450 m altitude; collecting lasted from 9 to 19 May. The forest turned out to be poor in dipterocarps, rich in Meliaceae and Annonaceae, but like on Mt Tanggamus, novelties seemed to be rare. The pastor at Giesting told Dr. Jacobs that he was the first white man since ten years to travel in the country. Conditions were good for exploration work, and nearly 500 numbers were taken, when possible all with 10 duplicates; the numbers, all in the name of M. Jacobs are 8021 to 8274 from Tanggamus, 8275 to 8515 from the lowland forest. The material was dried at Bogor and then sent to Leyden for labelling and distribution; the list of herbaria to receive duplicates has not yet been decided on. On 22 May the party was back at Bogor; soon after, Dr. Jacobs left for Holland. A printed account of the trip will be given in Blumea.

B o r n e o

In February-April 1969 Mr. H. P. N o o t e b o o m will make explorations in Sabah and Sarawak, especially hunting for Symplocos.

Dr. M. H o t t a, of Kyoto, stayed in Sabah, in the second half of 1968, focussing special attention on the Kinabalu area in 1969.

L e s s e r S u n d a I s l a n d s

Timor. Mr. E. L a r s e n, Forest Research Institute, Forestry and Timber Bureau, Banks Street, Yarralumlu, Canberra A.C.T. 2600, collected in 1968 Eucalyptus in Timor, both in the Indonesian and Timorese parts, and corroborated that there are two good species, hoe and anpupu, which are clearly recognized in the field, the first in the lowlands and hills, the latter generally from 450 m upwards. Around 450-750 m hybrid swarms occur.

P h i l i p p i n e s

The National Herbarium, National Museum, Manila, has made a 5-year plan for exploration. For 1968 and 1969 this will cover the island of Samar under a U.S. Army research grant. In 1970 an exploration will be made in Cagayan, in the Sierra Madre, NE. Luzon, in 1971 at Isabela in the same area but more to the south, and in 1972 in Catanduanes I.

With financial support of the Netherlands Organization WOTRO and the National Research Council of the Philippines a joint exploration was made by Dr. M. J a c o b s of the Rijksherbarium and Mr. D. R. M e n d o z a of the Philippine National Herbarium. Dr. Jacobs left Leyden on 7 Jan. 1968; after local preparation at Manila the party, which also included Mr. R. E s p i r i t u and Mr. E. R e y n o s o of the PNH as assistants, left for Baguio on 17 January, to make camp at Babadak on the SW. slope of Mount Pulog in Central Luzon at about 2400 m, at the beginning of the primary mountain forest, where rich collections were made, in phanerogams, mosses and ferns which are extremely well represented.

In 28 Jan. the camp was moved up to the open grassy top area of Mt Pulog, at ± 2700 m. Excursions were made across the large open hilly region, to the top (2890 m) on the 31st, and into the surrounding mossy forest in various directions and down to about 2100 m. The open grasslands owe their origin to fire, which in the dry season may consume vast tracts at great speed; these fires account for the relative poverty of the flora in the open, and marshes of any size are wanting. The dwarf bamboo Arundinaria niitakayamensis, also known from Formosa, plays an important part in both the destruction and the regeneration of the forest at that altitude. It penetrates the forest fringe for about four meters; this zone of forest is killed when a fire occurs while the bamboo persists. On the other hand, there where the bamboo vegetation does not suffer from the fire for a number of years, it forms a cover for seedlings of mountain forest species, which eventually may supersede the bamboo if there is no more fire. On 7 Febr. the party moved back to the Babadak camp, continuing collecting at lower altitude till the 10th.

While the vegetation on the surrounding lower mountains has suffered of terrible destruction by cutting and by recurring fire, a substantial tract of rich primary mountain forest is still to be found on the highest mountains of Luzon which form a row of three tops N.-S.: Tabayoc, Panotoan, and Pulog (except its summit region), above an altitude of 2100-2400 m, the straight distance between each being about 10 km. It appeared impossible to reach Mt Panotoan from Mt Pulog directly; it could be reached on a special trip, like Tabayoc;

both were botanically unknown. Since Tabayoc is higher and looked more promising, this mountain was chosen for exploration; camp was made by a trail on the western slope at 2350 m in the forest below an open saddle, on 14 Febr. Although the forest on Tabayoc was similar to that on Pulog, the open grassy parts were much smaller and suffered less from fire - the dwarf bamboo was found in one single place only - and moreover, there was quite some deep marshy land and four lakes. Here Potentilla papuana was found, a new record for the Philippines. The higher slopes of the mountain are completely under forest; the ascent was made on 16 Febr., presumably for the first time, led by Mr. Mendoza, who had blazed the trail along a very narrow rocky ridge. The summit is 2850 m. On 22 Febr. the party returned to Manila, where Dr. Jacobs spent two weeks working in the Herbarium.

On 7 March a second expedition was made, namely to the lowland forest in the Sierra Madre mountain chain, which stretches for about 500 km along the very East coast of Luzon in the northern part. With a rented jeep a party made collections at several stations in a lumber concession NE. and NW. of Dingalan, from sea-level up to about 1200 m. On 21 March the party moved to a camp on the road to Baler, further to the north, in Aurora Memorial Park, where fine and rich collections were made at 400-800 m, the forest here gradually coming into flower, till 25 March. During the next days, Dr. Jacobs and Mr. Mendoza travelled all up to the north by the highway west of the Sierra Madre, making local enquiries about possibilities and facilities for further exploration, for the Sierra Madre has only in recent times been opened up and this vast stretch of primary forest, which in many places descends to the sea, with also altitudes of up to 2000 m in places, is still largely unknown. Several big lumber firms have now been given concessions, and prospects for botanical exploration - especially in the months of April, May, and June, when the weather is dry and the forest in flower - look good. A report which gives the opportunities in greater detail has been prepared and in time will be available on request at the Rijksherbarium.

The collections were made in 10 duplicates wherever this was possible; all in the name of M. Jacobs. The drying, preidentification, labelling and distribution was done at the Rijksherbarium. The numbers 7001 to 7423 are from Pulog, 7424 to 7595 from Tabayoc, 7601 to 8020 from the Sierra Madre. The mosses, about 600, are to be numbered later, probably from about 8600 onwards. Set 2 will go to Manila, set 4 to Washington, set 6 to Canberra, both on behalf of Manila, set 8 to Los Banos. The other sets will be exchanged by Leyden with other institutes.

A printed account of the trip will be given in Blumea.

M o l u c c a s

Batjan. Dr. A. J. G. H. K o s t e r m a n s, accompanied by Mr. N e d i of Herbarium Bogoriense, made a short exploration of forests in the island of Batjan, N. Moluccas.

E a s t N e w G u i n e a.

Mr. J. W o m e r s l e y 's expedition to Mt Bosavi was discarded due to doubt about the serviceability of the airstrip and will instead go to Oksapmin, midway between Doma Peaks and Telefomin.

Dr. W. R. P h i l i p s o n spent August and early September hunting Araliaceae in New Guinea. He is gradually proceeding with revisions of several genera.

Dr. B. O. v a n Z a n t e n, Groningen, obtained a substantial grant from the WOTRO to study and collect bryophytes in New Guinea, Queensland, New South Wales, New Zealand, and Luzon, partly also to acquaint himself with their ecology as a background for his herbarium studies.

Mr. Ross A. H y n e s, of the Science Dept., Teacher's College, Goroka, E. Highlands District, is making some ecological studies on the Nothofagus forests of Papua and New Britain.

S o l o m o n s

Dr. Peter G r e e n of the Bern. P. Bishop Museum, Honolulu, will spend 6 weeks, in Aug.-Sept. in Santa Cruz for ethnobotanical purposes.